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# *ARTHRAXON HISPIDUS* (POACEAE) IN TEXAS: UPDATE

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## ABSTRACT

A second population of *Arthraxon hispidus* (Thunb.) Makino in Texas is documented, considerably west of the one reported in 1991 in Cass County. These plants are growing in abundance along the street curb of a watered lawn in Fort Worth. Photos are provided.

*Arthraxon hispidus* (Thunb.) Makino was first reported as naturalized in Texas by Brown and Schultz (1991) from a population in Cass County, in the northeastern corner of the state. There have been no other published reports (Diggs et al. 2006) and no additional collection of the species exists in BRIT-SMU, SBSC, TAMU, or TEX-LL. It is documented in the present report as a lawn weed in Fort Worth, more than 150 miles west of the locality in Cass County.

**Texas**. Tarrant Co.: population along about 30 feet of a watered lawn bordering the concrete street curb, Spanish Oak Drive near jct with Glenwood Drive at Overton Park, with dominant St. Augustine grass (*Stenotaphrum secundatum*) and scattered *Digitaria* and *Cynodon*, fruits just beginning to mature, 14 Aug 2011, *G.L. Nesom 2011-11* (BRIT, TEX). Figures 1–5.

Plants of *Arthraxon hispidus* (small carp grass, jointhead grass, basket grass) are distinctive in their lanceolate to ovate-lanceolate leaves with auriculate-clasping bases, racemes in a digitate cluster, and creeping habit, stems rooting at lower nodes. According to Thieret (2003), plants in the USA belong to var. *hispidus*, "the most widespread and variable of the four varieties." Chen and Phillips (2006) have characterized it as "an extremely polymorphic, polyploid species [$2n$ = 10, 18, 36] to which many names have been applied, both at specific and infraspecific rank." Kiger (1971) noted that spikelet length and presence of awns are variable even within populations in the USA and the native range, but these features are relatively uniform in the Fort Worth population. Because of the habit and leaves, *A. hispidus* without flowers bears a superficial resemblance to *Commelina communis* Also it is "sometimes confused (especially before flowering) with *Microstegium*, but *Arthraxon* has distinctly cordate-clasping leaves, which *Microstegium* lacks. Also vegetatively similar to *Oplismenus*" (Weakley 2011).

*Arthraxon hispidus* is native to Japan, China, Taiwan, Philippines, Indochina, New Guinea, Sri Lanka, Kashmir, and India (Kiger 1971; Van Welzen 1981; Thieret 2003). The species has become naturalized in Mexico, Central America, Hawaii (GCW 2011), and recently in Iran (Hamzeh'ee & Naqinezhad 2009). In the USA, its early advent was summarized and documented by Kiger (1971) and its current wide and abundant distribution in the eastern USA is mapped by Kartesz (2011).

Weakley (2011) notes that *Arthraxon hispidus* appears to be steadily increasing its abundance in the southeastern USA, where it commonly occurs in moist disturbed areas such as ditches, roadsides, fields, gardens, and pavement crevices and in bottomlands and low woods, on sand bars, and along shores of streams and lakes (Kiger 1971). It seems likely that the species already occurs elsewhere in east Texas since it is well-documented in Arkansas, Louisiana, and eastern Oklahoma. *Arthraxon hispidus* has been known to occur in Arkansas and Louisiana at least since 1950

(Hitchcock 1950). In fact, the lack of observations or reports of its weedy occurrence in Texas seems unusual, unless its westward spread has slowed.

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**LITERATURE CITED**

Brown, L.E. and J. Schultz. 1991. *Arthraxon hispidus* (Poaceae), new to Texas. Phytologia 71: 379–381.

Diggs, G.M., B.L. Lipscomb, M.D. Reed, and R.J. O'Kennon. 2006. Illustrated Flora of East Texas, Vol 1: Introduction, Pteridophytes, Gymnosperms, and Monocotyledons. Sida Bot. Misc. 26.

GCW. 2011. Global Compendium of Weeds. Based on data from Rod Randall's Global Compendium of Weeds database, dated 24 January 2007. <http://www.hear.org/gcw/>

Hamzeh'ee, B. and A. Naqinezhad. 2009. *Arthraxon* P. Beauv. (Gramineae) and *Carex caryophyllea* (Cyperaceae): New genus and species records from Iran. Iran. J. Bot. 15: 68–71.

Hitchcock, A.S. 1950. Manual of grasses of the United States (ed. 2, rev. A. Chase). U.S.D.A. Misc. Publ. 200. Washington, D.C.

Kartesz, J.T. 2011. North American Plant Atlas. The Biota of North America Program (BONAP). Chapel Hill, N.C. <http://www.bonap.org/genera-list.html>

Kiger, R.W. 1971. *Arthraxon hispidus* (Gramineae) in the United States: Taxonomic and floristic status. Rhodora 73: 39–46.

Chen, S.-l. and S.M. Phillips. 2006. *Arthraxon*. Flora of China 22: 571–572. <http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=102691>

Thieret, J.W. 2003. *Arthraxon*. Page 677, *in* M.E. Barkworth, K.M. Capels, S. Long, and M.B. Piep (eds.). Flora of North America, Vol. 25. Oxford Univ. Press, New York and Oxford

Van Welzen, P.C. 1981. A taxonomic revision of the genus *Arthraxon* Beauv. (Gramineae). Blumea 27: 255–300.

Weakley, A.S. 2011. Flora of the Southern and Mid-Atlantic States (working draft of 15 May 2011). Univ. of North Carolina Herbarium, Chapel Hill. <http://www.herbarium.unc.edu/flora.htm>

Figures 1–5. *Arthraxon hispidus* along street curb of lawn in Fort Worth, Texas. Photos 14 August 2011.

Figure 2. Above.

Figure 3.

Figure 4a and 4b. Mature to nearly mature infructescences.

Figure 5. Note long cilia on leaf margins in the area of the auriculate-clasping base.